

RECEIVED

JUL 2 2 2005

PUBLIC SERVICE COMMISSION

July 22, 2005

HAND DELIVERED

Ms. Elizabeth O'Donnell Executive Director Public Service Commission 211 Sower Boulevard Frankfort, KY 40601

Re: PSC Case No. 2005-00089

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission an original and eleven copies of the Responses of East Kentucky Power Cooperative, Inc. to the Commission Data Request 3 in the above-styled case.

Very truly yours,

Charles A. Lile

Senior Corporate Counsel

Mar a Lih

Enclosures

Case No. 2005-00089

The Application of East Kentucky Power Cooperative Inc. for a Certificate of Convenience and Necessity for the Construction of a 138 KV Electric Transmission line in Rowan County, Kentucky

Post-Hearing Data Request

- 1. What is the estimated annual cost to EKPC of the proposed transmission line as recommended in the Application and what would be the estimated monthly bill impact to its member systems?
 - A. The estimated annual cost is \$399,000 as shown in Paragraph 13 of the Company's Application. As indicated by Mr. Oliva at the hearing, EKPC would not file an application with the Commission to reflect such costs in its wholesale rates. It is estimated that the annual cost of the line would amount to an increase of \$.04 per month for a typical residential customer using 1,000 kwh per month, if the cost was ever reflected in EKPC's wholesale rates and passed through to retail customers.
- 2. What is the estimated annual cost to EKPC of the "Cranston-Parallel line alternative" and what would be the estimated monthly bill impact to its member systems?
 - A. The "Cranston-Parallel Line Alternative" would result in an estimated annual cost of about \$480,000. EKPC would not file an application with the Commission to reflect such costs in its wholesale rates. It is estimated that the annual cost of this line alternative would result in an increase of \$.05 per month for a typical residential customer using 1,000 kwh per month, if the cost was ever reflected in EKPC's wholesale rates and passed through to retail customers.
- 3. What is the estimated annual cost to EKPC of the "KY PSC Staff/Consultant Developed Alternative" and what would be the estimated monthly bill impact to its member systems?
 - A. The "KY PSC Staff/Consultant Developed Alternative" would have a capital cost of approximately \$5,993,000 and result in an annual cost of about \$483,000. EKPC would not file an application with the Commission to reflect such costs in its wholesale rates. It is estimated that the annual cost of this line alternative would result in an increase of \$.05 per month for a typical residential customer using 1,000 kwh per month, if the cost was ever reflected in EKPC's wholesale rates and passed through to retail customers.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2005-00089

INFORMATION REQUEST RESPONSE

RESPONSE TO PUBLIC SERVICE COMMISSION DATA REQUEST 3

In response to a request for information made by the Commission on July 18, 2005, EKPC has developed the costs to construct an alternative 138 kV line (PSC Staff/Consultant Proposed Alternative). This Alternative constructs a new 138 kV line between the Cranston Substation and the Rowan County Substation as follows (see the enclosed map):

- 4.4 miles of 138 kV line along new rights-of-way from the Cranston Substation to Kentucky Utilities' Goddard-Rodburn 138 kV line corridor
- 3.2 miles of 138 kV line parallel to Kentucky Utilities' Goddard-Rodburn 138 kV line
- 2.0 miles of 138 kV line constructed on existing rights-of-way by rebuilding the existing Hilda-Rowan County 69 kV line as a double-circuit 138/69 kV line

The estimated cost developed for the PSC Staff/Consultant Proposed Alternative is attached as Data Response Exhibit 1. These physical estimates were developed with the same assumptions, as the costs for EKPC's Proposed Alternative, however the route has not been verified in any way by field reconnaisance. Should undetected obstacles be encountered, the cost estimates would likely increase. For comparison purposes, the cost of EKPC's Proposed Alternative is attached as Data Response Exhibit 2.

This PSC Staff/Consultant Proposed Alternative is electrically equivalent to EKPC's Proposed Alternative, although it is approximately 3.7 miles longer. A comparison of Data Response Exhibits 1 and 2 indicates that the additional cost of the PSC Staff/Consultant Proposed Alternative is slightly more than \$1,000,000 in 2004 dollars.

In addition to the additional cost, other disadvantages of the PSC Staff/Consultant Proposed Alternative are:

- has through the Daniel Boone National Forest, which could result in a three-year delay in completion of the project. The area transmission system will not have sufficient capacity to provide reliable service during this period. In fact, EKPC's "Assessment of Expected System Performance 2005 Summer Conditions", which was developed to satisfy ECAR assessment requirements, indicates that potentially severe system problems are expected in the area due to the absence of this line. Significant redispatch of EKPC units is expected in the interim. An additional delay in the project will increase the redispatch cost that will be absorbed by EKPC's ratepayers. Also, the potential for cascading outages of transmission facilities in the area, which would result in significant loss of load, was identified at existing load levels. This risk will increase as load grows over the next three years.
- An outage of the Hilda-Rowan County 69 kV line for approximately two months will be required to rebuild as a double-circuit with the new 138 kV line. If the Rowan County 138-69 kV autotransformer were to fail during this construction outage, the Elliottville 69-12 kV distribution substation could not be served until either a replacement transformer could be moved to Rowan County or the Hilda-Rowan County 69 kV line could be returned to service.

DATA RESPONSE EXHIBIT 1 EAST KENTUCKY POWER COOPERATIVE CAPITAL COST ANALYSIS

KY PSC STAFF/CONSULTANT DEVELOPED ALTERNATIVE: CRANSTON-ROWAN COUNTY 138 KV LINE VIA ROUTE PARALLEL TO KU'S GODDARD-RODBURN 138 KV LINE BY 2004

Project Name	Estimated Cost	Effective Year of Cost	Install Date (Year)	Escalation	IDC @ 5.0%	Escalated Cost + IDC
Cranston-Cranston Tap 138 kV Line Segment (4.4 miles 795 MCM on new R/W)	1,683,440	2001	2004	8.3%	91,144	1,914,021
Cranston Tap-Parallel 138 kV Line Segment (3.2 miles 795 MCM on parallel R/W)	1,064,320	2001	2004	8.3%	57,624	1,210,100
Rodburn Area-Rowan County 138 kV Line Segment (2 miles 795 MCM - rebuild as Dbl. Ckt. on existing R/W with Hilda-Rowan Co. 69 kV)	965,200	2001	2004	8.3%	52,257	1,097,404
Goddard 138 kV Switching Substation	951,000	2001	2004	8.3%	51,489	1,081,259
Rowan County Substation (Add 2-138 kV breakers)	554,000	2001	2004	8.3%	29,994	629,882
Cranston Substation Switch Structure (2-Way 138 kV Switch)	44,065	1994	2004	31.2%	2,890	60,689
Total Cost	5,262,025					5,993,354

DATA RESPONSE EXHIBIT 2 EAST KENTUCKY POWER COOPERATIVE CAPITAL COST ANALYSIS

ALTERNATIVE 1 (EKPC PROPOSED ALTERNATIVE): CRANSTON-ROWAN COUNTY 138 KV LINE BY 200

Project Name	Estimated Cost	Effective Year of Cost	Install Date (Year)	Escalation	IDC @ 5.0%	Escalated Cost + IDC
Cranston-Rowan County 138 kV Line (7.3 miles 795 MCM) ¹	2,793,000	2001	2004	8.3%	151,217	3,175,558
Goddard 138 kV Switching Substation	951,000	2001	2004	8.3%	51,489	1,081,259
Rowan County Substation (Add 2-138 kV breakers)	554,000	2001	2004	8.3%	29,994	629,882
Cranston Substation Switch Structure (2-Way 138 kV Switch)	44,065	1994	2004	31.2%	2,890	60,689
Total Cost	4,342,065					4,947,387

^{&#}x27;Actual mileage of proposed route is 6.9 miles, which results in a revised estimated cost of \$2,640,000 and a revised escalated cost of \$3,002,076